GROWERTALKS

Features

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Fünf Maschinen

Chris Beytes

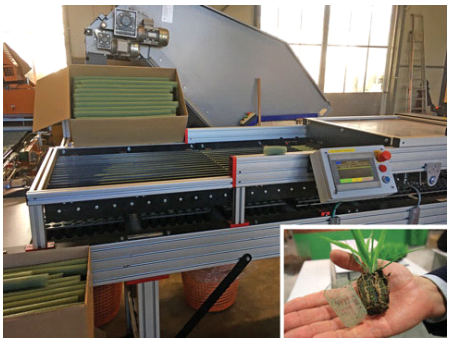
IPM Essen, held in Essen, Germany, January 23-27, features 1,564 exhibitors from 45 countries, a large majority of which offer colorful flowers and plants. But for this story, we skipped past the delicate foliage and instead sought out the rugged aluminum and steel of the machines needed to grow those colorful flowers and plants faster and more efficiently. Here are five that we think are the most significant of 2018.

ISO Group's Cutting and TransPlanter

Unrooted cutting sticking machines are pretty new to the market and exciting! But the one drawback to them is that they only stick unrooted cuttings, and for most growers, that's needed for just a short time during the production season.

ISO Group has found a way to get more versatility from their ISO Cutting Planter 2500 by adding plug-planting capabilities to the machine. They do that by adding a second supply belt for plug trays. Also, the cutting sticking head on the robot gets switched out for a transplanting head featuring from two to six grippers (with two grippers, capacity is about 5,000 plants per hour).

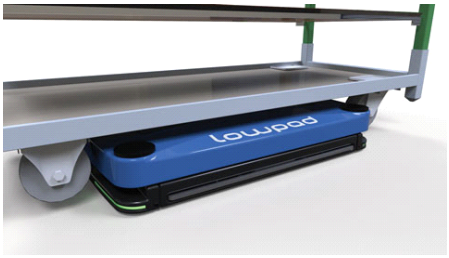
This lets you use the machine to plant a wide variety of products, from unrooted cuttings to bedding plant plugs to rooted liners.



Klausmann-Deilmann's Growcoons

Substrate supplier Klausmann-Deilmann has entered the world of stabilized rooting media with the introduction of the "Growcoon," a small, conical-shaped mesh pot made from a bio-based, biodegradable glue, into which you put your favorite propagation mix. They're made by Dutch manufacturer Maan BioBased Products. Growcoons come in a range of standard sizes, from 19 mm to 60 mm, with other special sizes available, some designed for U.S. trays. Because they have a bottom (unlike paper pots), they can be graded, potted or otherwise handled sooner, as the soil won't spill out. Klausmann-Deilmann calls them the "perfect combination of a loose substrate and a stable root ball."

Now how to get them into trays for filling? Flier Systems came to the rescue, developing a special dispenser that will put up to 43,000 Growcoons per hour into trays. Interchangeable heads let you run more than one size Growcoon on the same machine.



TTA/Eurotec's Lowpad

We might have missed Lowpad had we not stopped to watch a video playing in the TTA stand in the Galleria at Messe Essen. Lowpad is a high-tech internal transport solution intended for the world of big fulfilment warehouses. It comes from a sister company of TTA called Eurotec.

Lowpad is one of a new kind of internal transport called an "AGV" or automated guided vehicle. These are designed to autonomously move product in warehouse-type environments. You've seen these little vehicles in the videos of Amazon's fulfilment centers, lifting and moving tall racks of product and driving them to and from the picking areas. What makes Lowpad special is its height: just 4¾ in., nearly 12 in. shorter than competing AGVs. That means more space for product in the warehouse.

We're writing about Lowpad because it can just as easily pick up and move a plant shipping rack—or pull a whole train of them. It operates wirelessly, using a camera and LIDAR, to guide the independently steering drive wheels. It can automatically determine the most efficient route from the greenhouse to the packing area, freeing up employees to do other things. Or it can follow an employee through the greenhouse. There's also a pallet jack version, which could move potting soil or other heavy materials around your facility as needed.

We're not sure how soon we'll see Lowpad moving racks of annuals in and out of greenhouses, but with labor costs and availability being what it is, it won't be long. The big plant auctions are a likely first place to see them at work. Check it out at www.lowpad.com.

Javo Aromatic Seeds Volume Seeder

Precision drum and needle seeders are excellent at putting one seed in a plug tray cell, but what if you want 10 or 20 seeds in a 4-in. pot, such as with herbs? Then you need a dedicated seeder capable of speed and precision while handling large quantities of seed. That's what Javo has designed with its Aromatic Seed Volume Seeder.

It dispenses a precise quantity of seed downward, through a precision seed chamber, and the seed is dispersed evenly on the soil surface through holes in a plate. Vibrators ensure that all seed gets dispensed. One seeder head can sow about 1,800 pots per hour; you can use multiple heads to handle more pots simultaneously. Every-thing is made from stainless steel and bronze for durability. Javo can design a unit for any type of seed that needs to be multi-sown. They can also set up heads to dispense vermiculite, for top-dressing. A touch-screen allows for accurate settings of timing of the seeders, vibrator and vermiculite dispensers.

A single head seeder is about $8,400; a triple-head unit is $13,000.

Update on AutoStix

AutoStix isn't brand new, but it's still of great interest to growers because it's one of only two commercial systems for sticking unrooted cuttings (the other being ISO Group, page 54). The Visser stand in Hall 3 was constantly

buzzing with folks watching demos of the machine at work.

We asked Ball Horticultural Company's Michael Henzler for an update on AutoStix (Ball is Visser's North American distribution partner). He told us that there are currently 11 AutoStix machines running in North America and all the major unrooted cutting suppliers are supplying test strips to growers (AutoStix uses strips of cuttings that are stuck offshore). Visser expects at least 10 more machines to be in place for 2019, with an estimated sticking volume of 60 million cuttings.

One new benefit to users is an Internet portal, www.autostix.eu, which will provide premium access to AutoStix participants with all sorts of information available, such as best practices, how-to videos, FAQs, updates on service and so on. **GT**